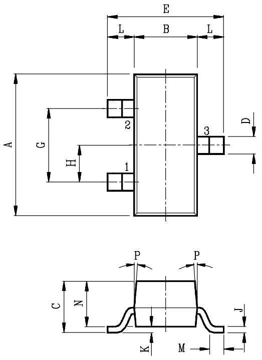
SEMICONDUCTOR
TECHNICAL DATA

KDS187
SILICON EPITAXIAL PLANAR DIODE

ULTRA HIGH SPEED SWITCHING APPLICATION.

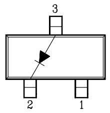
FEATURES

- Small Package : SOT-23.
- Low Forward Voltage : V_F=0.92V (Typ.).
- Fast Reverse Recovery Time : t_{rr}=1.6ns(Typ.).
- Small Total Capacitance : C_T=2.2pF (Typ.).



DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/−0.15
C	1.30 MAX
D	0.45+0.15/−0.05
E	2.40+0.30/−0.20
G	1.90
H	0.95
J	0.13+0.10/−0.05
K	0.00 − 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/−0.10
P	7°

1. NC
2. CATHODE
3. ANODE

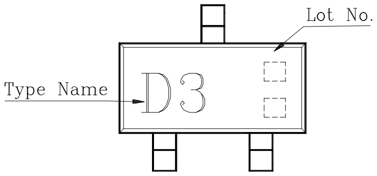


SOT−23

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Maximum (Peak) Forward Current	I_{FM}	300	mA
Average Forward Current	I_O	100	mA
Surge Current (10ms)	I_{FSM}	2	A
Power Dissipation	P_D	150	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

Marking



ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	I_F=1mA	-	0.61	-	V
	$V_{F(2)}$	I_F=10mA	-	0.74	-	
	$V_{F(3)}$	I_F=100mA	-	0.92	1.20	
Reverse Current	I_R	V_R=80V	-	-	0.5	μA
Total Capacitance	C_T	V_R=0, f=1MHz	-	2.2	4.0	pF
Reverse Recovery Time	t_{rr}	I_F=10mA	-	1.6	4.0	nS